

UNIVERZITA KARLOVA V PRAZE

FILOZOFICKÁ FAKULTA
ÚSTAV ANGLICKÉHO JAZYKA A DIDAKTIKY



Bakalářská práce
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Filled pauses in learner and native English

Vyplněné pauzy v žákovské a rodilé angličtině

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2019 Univerzita Karlova v Praze

Poděkování

Ráda bych touto cestou poděkovala PhDr. Tomáši Gráfovi, Ph.D., za pomoc při psaní bakalářské práce, pochopení, trpělivost a porozumění, a také za inspirace.

Čestné prohlášení

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V Praze dne

Souhlasím se zapůjčením bakalářské práce ke studijním účelům. I have no objections to the BA thesis being borrowed and used for study purposes.

Vyplněné pauzy v žákovské a rodilé angličtině

Abstrakt

Tato bakalářská práce analyzuje vyplněné pauzy jako jev váhání v řeči rodilých a pokročilých mluvčích anglického jazyka.

Cílem práce je prozkoumat fenomén vyplněných pauz, konkrétně vztah mezi pozicemi vyplněných pauz ve větách a rolí, které nesou. Jedním ze záměrů práce je analýza vyplněných pauz jako strategie řízení řeči. Srovnávací mezi jazyková analýza bude jednou z hlavních metod používaných v práci.

Výzkum je založen na korpusu LOCNEC, který je vybudován na transkripcích rozhovorů s rodilými mluvčími angličtiny a na paralelním korpusu LINDSEI_CZ, který obsahuje transkripce projevů českých studentů angličtiny. Pro účely výzkumu byli z každého korpusu náhodně vybráni 5 mluvčí. Jejich přepsaná řeč byla zkoumána pro případy vyplněných pauz, ty, které jsou analyzovány v práci, jsou následující: *er*, *erm*, *eh*, *em* a *mm*. Velikost přepsaných rozhovorů v LOCNEC je 9 261 tokenů a v LINDSEI_CZ – 10 048 tokenů.

Ve studii bylo identifikováno 1 324 případů použití vyplněných pauz v rodilé a žákovské angličtině: 656 výskytů vyplněných pauz v analyzované datové sadě LOCNEC a 668 v LINDSEI_CZ. Výsledky výzkumu poskytují informace o distribuce vyplněných pauz, frekvence jejich jednotlivých výskytů, o konkrétních pozicích zmíněných pauz ve větě a jejich vztahu k syntaktickým frázím. Výskyty vyplněných pauz byly klasifikovány na základě jejich pozice ve větě podle kódovacího systému popsaného v kapitole o metodice. V současné studii bylo zjištěno, že existuje tendence mezi nerodilými mluvčími angličtiny používat spíše vyplněné pauzy v rámci věty než na začátku ve srovnání s rodilými mluvčími. Také existuje rozdíl v typu vyplněných pauz, které rodilí a žáci mají tendenci používat častěji.

Tato práce může být užitečná pro budoucí zkoumání různých hezitačních prostředků nebo pro další zkoumání pozic vyplněných pauz v rodilé a žákovské řeči.

Klíčová slova: pauze, pauzologie, vyplněné pauzy, fenomén váhavosti, korpus, metodologie, postup značkování, korpusová lingvistika, osvojování druhého jazyka, korpus žáků, LINDSEI, LOCNEC.

Filled pauses in learner and native English

Abstract

Current BA thesis targets to study filled pauses as a hesitation phenomenon in the speech of native and advanced non-native speakers of English.

The aim of the thesis is to investigate the phenomenon of filled pauses, specifically the relation between the positions of the filled pauses in the sentences and clauses, and the roles they carry. One of the objectives of the work is to analyse filled pauses as a speech management strategy. Comparative interlanguage analysis is going to be one of the main methods employed in the paper.

The research is based on the corpus LOCNEC, which is based on the transcriptions of interviews with native speakers of English and on the parallel corpus LINDSEI_CZ, which contains transcriptions of speech of Czech learners of English. For the purpose of the research, from each corpus were randomly selected 5 speakers. Their transcribed speech was examined for the instances of filled pauses, the ones that are analysed in the work are the following: *er*, *erm*, *eh*, *em* and *mm*. The size of the transcribed interviews in LOCNEC is 9,261 tokens, and in LINDSEI_CZ it comprises 10,048 tokens.

In the study were identified 1,324 instances of filled pauses' use in the native and learner English: 656 occurrences of FPs in the analysed LOCNEC dataset and 668 in the LINDSEI_CZ one. The results of the research provide with information about the distribution of the FPs, frequency of their individual occurrences, concrete positions of mentioned FPs in the sentence and their relation to syntactical phrases. The FPs' occurrences were classified on the basis of their sentence position according to the coding system described in the methodology chapter. In the current study was found that there is a tendency amongst the learner speakers of English to use filled pauses within clauses rather than at the beginning, comparing to the native speakers. Also, there is a difference in the types of filled pauses that native and learner speakers tend to use more often.

This thesis can be useful for future research of different hesitation markers or for further research of filled pauses' positioning in native and learner speech.

Keywords: pause, pausology, filled pauses, hesitation phenomenon, corpus, methodology, procedure of coding, corpus linguistics, second language acquisition, learner corpus, LINDSEI, LOCNEC.

List of Abbreviations

SLA – second language acquisition

FP – filled pauses

HP – hesitation phenomena

LOCNEC – Louvain Corpus of Native English Conversation

LINDSEI – Louvain International Database of Spoken English Interlanguage

L1 – first language

INP – initial position in a noun phrase

IVP – initial position in a verb phrase

IAP – initial position in an adjectival phrase

IAvP – initial position in an adverbial phrase

IPrP – initial position in a prepositional phrase

MNP – middle position in a noun phrase

MVP – middle position in a verb phrase

MAP – middle position in an adjectival phrase

MPrP – middle position in a prepositional phrase

O – other instances of filled pauses

NP – noun phrase

VP – verb phrase

AP – adjectival phrase

PrP – prepositional phrase.

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1. Introduction

Until recently items and structures found most typically in spoken communication have not been fully described. The phenomenon of filled pauses and hesitation phenomenon is something that everyone encounters in their everyday speech. Those are the little sounds we make, for example: *er*, *eh*, *em*, *mm*, *erm*, *hm*, and many more; or words we articulate as *well*, *like*, *you know* and others. We pronounce them for different reasons, at times we are planning ahead, or we could be hesitating for example. The aim of this thesis is to investigate the phenomenon of filled pauses, specifically the relation between the positions of the filled pauses in the sentences and the different roles and functions that they may carry. The filled pauses that are going to be dealt with in the current work are: *er*, *eh*, *em*, *mm*, *erm*. They will be analysed as a speech management strategy.

A lot of attention is being paid to pause research nowadays. Even though in British and American English filled pauses might be transcribed differently: for example, *eh* in British English is *um* in American, the same case with *em* an *um* respectively; the attention to the phenomenon of filled pauses for the past thirty years has been only increasing. As some researches point out, we do not study pauses for the sake of pauses, but, for example, to help create a general unified theory of speech production and its perception. Pausology, a branch of linguistics that is studying filled pauses and pauses in general, is connected with psycholinguistics, as to determine what roles do filled pauses carry linguists need to speculate about speaker's intentions. "The filled pause was first formulated as a psycholinguistic term by Maclay and Osgood in 1959" (O'Connell, Kowal, 2004: 459).

In the theoretical chapter of the current thesis is going to be explained the concept of filled pauses, mentioning pausology and also introducing the different types of pauses. The general overview of the topic will be followed by an explanation of the variety of roles that filled pauses carry in an utterance, providing examples. Since in this study corpora are used, the chapter will also provide an overview of corpus linguistics.

The Material and Method chapter will provide information regarding applied methodology, used corpora, as well as details about how the recording were structured and transcribed. Also in the chapter will be described the procedure of coding the filled pauses and the tools that were used during the study to facilitate data processing. The chapter will end with portrayal of the uncertainties that appeared during the research.

In the Research and Results chapter will be presented the detailed research based on the mentioned corpora with examples from the analysed transcriptions. Filled pauses will be analysed on the basis of their distribution over corpora. In the framework of current study close attention is being paid to the positions of the filled pauses in the utterances, specifically their relation to other syntactical elements. The results of this analysis will be presented in the chapter, as well as description of the identified functions of analysed filled pauses in accordance with the positions they have in the sentence.

This BA thesis is to be concluded with a Conclusion chapter, which will sum up the outcomes of the research and indicate in which research areas it may be useful in the future.

2. Theoretical background

2.1. Pausology and types of pauses

Oxford Advanced Learner's Dictionary defines a pause as "a period of time during which sb stops talking." (Wehmeier, 2005: 1112) Elaborating this definition, we can add that a pause is either filled or silent; being filled with a word or sound makes it a tool with certain effect. The study of the phenomenon of filled pauses is relatively young in the field of linguistics, even though filled pauses occur in every language and every speaker uses them to some extent in his or her speech. Some of the earliest evidence of filled pauses in recorded speech comes from Thomas A. Edison's first public recording: "Let us not forget" (1919). Starting at 0:28, Edison starts his speech with, "This is uh Edison speaking."¹ Many linguists attempted to theorize the topic, but since pauses are a phenomenon that occurs in speech, it has appeared to be rather challenging to theorize occurrences that emerge in the natural flow of language. It is generally difficult to talk about theory in SLA, "despite Brown's (1989, p. 169) baffling statement that one of the gratifying things about SLA research "is that it is research based on theory," it is doubtful that anything we have in SLA even qualifies as a "theory" (Gregg, 1984, p. 79), much less a paradigm." (Griffiths, 1990: 101) A thorough review of the literature on the topic is undoubtedly needed for the understanding of the complexity of the subject.

This phenomenon gave rise to a field of linguistics called pausology. Pausing is a phenomenon which exists in almost all languages: "Being a motor activity, speech production cannot be continuous – hence interruptions and pauses are indispensable." (Bilá, Džambová, 2011: 21) Goldman-Eisler is considered to be the pioneer of pausology, and the 1978 Kassel Workshop, designated in her honour, clarified the status of pausology as a component part of psycholinguistics. "Goldman-Eisler's first pausological experiments were published in the early 1950s. Since then, conventions of pausological measurement have gradually been established, and the importance of comparable methodologies has been emphasized." (Griffiths, 1990: 107)

The pause phenomenon is one of the temporal variables studied in psycholinguistics. It comprises pause duration, distribution, and frequency. Important distinction between silent pauses and filled pauses is consistently made in the literature

¹Ralph Rose, "The Ums and Uhs of Yesteryear". Available from: <http://filledpause.com/musings/ums-and-uhs-yesteryear>.

review on the topic: “as indicated by Crystal (1991), pauses can be divided into two types: filled and silent, both being common at word boundaries rather than within words.” (Bada, 2006: 125) Filled pauses are an integral part of an even bigger area called hesitation phenomena. Hesitation phenomena (HP) have increasingly been classified as temporal variables and have often been included in pausological studies. Temporal variables in speech have been the subject of study since the mid-fifties. They comprise not only filled pauses (such as *er*, *um*) but also repeats and false starts. “Investigation of such phenomena constitutes the empirical discipline of pausology, defined by O'Connell and Kowal (1980) as, "the behavioral investigation of temporal dimensions of human speech" (p. 8).” (Griffiths, 1990: 107)

The questions posed in pausological research are of great relevance to language teaching and contribute to many language-teaching theories. A study by Conrad of the year 1989 was focused largely on pausology and is seen as one of the first serious studies of temporal variables in the SLA literature. Pausology has been investigated from the point of view of its impact on comprehension. Since pausology is a study of temporal variables in speech, pause phenomena have their role in facilitating comprehension. They are assumed to facilitate comprehension in two ways: by providing processing time and by grouping words into logical constituents: “Pauses are also grammar facts marking the boundaries of intonation groups and coinciding with syntactic boundaries.” (Bilá, Džambová, 2011: 21-22). While talking about language comprehension it is important to be aware of the limited cognitive capacity of human short-term memory, which explains “an appreciation of the strategies a perceiver uses to "chunk" the language input into elements larger than the single sounds or syntactic features of the speech signal.” (Conrad, 1989: 2) Based on the studies about pausology it could be said that “the idea that pauses, through providing processing time, facilitate comprehension is sufficiently well documented to be considered veridical.” (Griffiths, 1991: 349)

As we have seen pauses can be classified into different groups. Different linguistic traditions classify them from various perspectives, even though the topic is relatively young, common grounds on this do indeed exist. “Viola and Madureira (2008) classify pauses from several aspects – from the structural, functional and distributional points of view.” (qtd. in Bilá, Džambová, 2011: 22-23) If looking at pauses from the structural aspect, they can be divided into silent, filled or pause phenomena expressed by acoustic-phonetic features such as lengthening, changes in voice quality and fundamental frequency

variation. Unfilled pause or silent, is simply a silence, usually it lasts a second or two. The filled pauses are those that include a non-linguistic element, such as, lengthening of part of a word, most frequently a vowel (type [a:], [o:]) or sounds such as [m:]. Thus, a filled pause can be a vocalization as seen above, or a lexical form such as *like, well, yes yes, you know* and many others. A popular view in pausology says that “filled pauses and unfilled pauses were a matter of individual differences; the relative “preference” for hesitation phenomena of different types seems to be an aspect of individual style of speaking.” (Goldman-Eisler, 1961: 18) “Functional point of view shows us that pauses can be classified into respiratory (taking breath), discursive (planning the discourse and structuring parts of the discourse) and expressive (conveying attitudes and emotions and subcategories of expressive pauses include, among others, dramatic and emphatic uses) (Viola and Madureira, 2008)” (qtd. in Bilá, Džambová, 2011: 22). Thus, it is apparent that pauses facilitate comprehension not only by dividing speech into constituents that would make sense for the hearer, as discussed above, but they also comprise emotive ground in order to facilitate the hearer’s understanding of speech. From the distributional point of view, “pauses can occur within or between sentences and other morpho-syntactic constituents.” (Bilá, Džambová, 2011: 22-23) This point of view is engaged with the positions of individual pauses in the act of speech, their distribution among other syntactical elements and how it influences speech and its perception by the hearer.

While filled pauses have been judged for a long time as one of the main markers of disfluency in learner language, researchers have lately analysed them in native speech and found a great diversity in their additional patterns and functions. “Spontaneous speech is filled with disfluencies—unwanted pauses, elongated segments, fillers (such as uh and um), editing expressions (such as I mean and you know), word fragments, self-corrections, and repeated words. Most disfluencies seem to reflect planning problems. When speakers cannot formulate an entire utterance at once, they may suspend their speech and introduce a pause or filler before going on. And when speakers change their minds about what they are saying, they may suspend their speech and then add to, delete, or replace words they have already produced. Disfluencies have long been used as evidence of planning.” (Clark, Wasow, 1998: 201) As a part of planning component, a filled pause can mark a shift in topic, especially when accompanied by discourse markers such as *right* or *well* or *okay*.

They may also often indicate that speakers have not finish what they want to say and wish to continue:

*I suppose, **er**, she'll, she'll take over next week then?*²

An important characteristic of filled pauses is that they operate partly below the level of consciousness and can therefore be an unobtrusive and effective instrument in facilitating spoken interaction. This indicates that they are not simple pauses, but in any interaction, they carry certain functions or roles. The overview of different functions of filled pauses with examples from corpora and scientific papers is to be explored in the following chapters.

² Data cited herein have been extracted from the British National Corpus, distributed by the University of Oxford on behalf of the BNC Consortium. All rights in the texts cited are reserved. Available from: www.bncweb.lancs.ac.uk.

2.2.Functions of pauses

In most cases, filled pauses are not primarily used haphazardly, or automatically resulting from other communicative devices. It could be suggested that, like other speech components, they should be looked upon as task-performing elements, employed to bring about certain effects, thus they carry certain functions. It may be objected that a function is a mode of action by which it fulfils its purpose, and since most of the time FPs are unintentional, perhaps unconscious, the proposed effect cannot be the fulfilling of a purpose. However, the speaker may well make use of FPs unconsciously in aiming for a certain effect that he or she achieves without understanding how it was brought about. This view is supported by many linguists, for example by G. Kjellmer (2003: 170, 198.). When talking about functions FPs carry and determining them, it is vital to look at elements they co-occur with; the “company” they keep, we will deal with this more in Chapter 4, when we will talk about the results of current research.

The most common functions that filled pauses carry, upon which majority of the linguists agree are:

1. Marking hesitation

Dictionaries provide us with the definition of a FP saying that it occurs to denote speaker’s hesitation or indecision. Hesitation phenomena were earlier regarded as extra-linguistic. Nevertheless, hesitation pauses are to be conceived as a very basic feature in any linguistic performance, especially in a natural flow of speech.

2. Signposting speaker turns

This function in conversation splits as follows:

- a. Turntaking

When a speaker wants to initiate a conversation from his side he can start it by articulating any of the filled pauses, it signals to the other participants that a person wants to convey information and participate in the communication. “As Stenström (1990: 227) points out, filled pauses (= our er(m)s) often serve as turn initiators.” (Kjellmer, 2011: 182)

- b. Turnholding

Another function evolving out of turntaking is that of turnholding. “A speaker who is at a loss for a word and falls silent for an instant runs the risk of being interrupted by his interlocutor(s) or of losing their interest. A pause filled with er(m) (as with other fillers) will indicate that the speaker is preparing a new information unit, intends to go

on speaking and is not willing to yield his turn.” (Kjellmer, 2011: 184-185) By some of the researches this function is also sometimes regarded as indicating a delay. The filled pauses carrying this function are mainly hinting so that participants would let the others finish their utterance and not interrupt. In those cases, filled pauses are just there in the conversation in order to take up time.

c. Turnyielding

“Paradoxically, it is often difficult to distinguish in writing the function of turnholding from that of turnyielding, particularly when we have no information on the relevant prosodic elements. Both can occur at the end of propositions, but while turnholding indicates that the speaker wishes to continue, turnyielding rather suggests the opposite. The use of FPs in turnyielding occurs in situations where the hesitation element is very prominent.” (Kjellmer, 2011: 185)

d. Co-occurrence

The three types, turntaking, turnholding and turnyielding, in speech often co-occur. The following examples seem to be ones of unsuccessful turnholding followed by turntaking:

ukspok00095 <M07> They still have their Dukes and Marquesses and Counts and all sorts but none of these *er* titled people are entitled to sit anywhere.

<M01> *Mm*.

<M07> They *er*.

<M01> *Er* what are [sic] the difference between the House of Deputies and the Senate?

ukspok00812 I don't know how I got on to this. Right. Well that's *erm*

<M01> *Er* now all this experience must have been leading up to a terrific *erm*
(Kjellmer, 2011: 186)

3. Attracting attention

Introductory filled pauses are sometimes used to attract attention and to establish a certain contact with the participants of the conversation:

ukspok00769 With a twenty-four thousand majority that's the largest majority William Hague has ever enjoyed in Richmond. He's about to make his speech now.

<M11> *Er* Mr Returning Officer may I be the first to congratulate you on the efficient and expeditious way in which you have conducted this count along with all your *er* assistants.
(Kjellmer, 2011: 187)

A use of a filled pauses with such effect is specifically common when a speaker wants to begin a conversation and is trying to capture the attention of the other hearer(s).

4. Highlighting

A related significant function of *er* or *erm* is that of focusing the listener's attention on an important, semantically heavy element in the delivery that is about to follow. This way the appearance of a filled pause indicates to the hearer that a new important unit is about to follow, and the speaker has time to prepare or change the focus of attention. This could also indicate that filled pauses occur more frequently before lexical words than before function words. "The FP highlights the following element, suggests that it is being chosen circumspectly and focuses the listener's attention on it." (Kjellmer, 2011: 187) "Repeated uses of highlighting *er(m)* are found in:

ukspok00040 *Erm* and then the quality of the oils going

<ZF1> into

<ZF0> into the *erm* organs and the bloodstream you can actually treat things like *erm* acid stomach or

<ZGY> itchy bowel

<ZG0> <ZGY> liver *er* migraines *erm* sciatica lumbago." (Kjellmer, 2011: 188)

5. A sign of correction

Another function of filled pauses is that of serving as a correction marker in repairs and reformulations, indicating that a more correct or more suitable word or phrase than the one(s) just said will follow. In terms of distribution this function may be carried by a filled pause in any part of the utterance, whether it is in the middle of it or it may occur even in the middle of a syntactical phrase. "The speaker may have produced or be in the middle of producing an incorrect pronunciation, a factually or linguistically incorrect word, a socially unsuitable form, a syntactic error, etc., which he wishes to correct (Levelt 1989: Ch. 12)." (qtd. in Kjellmer, 2011: 188) If a correction is made out of grammatical reasons, it is more likely to expect a filled pause carrying this function in learner English rather than in a native communication.

A more comprehensive type of correction occurs when the speaker wants to recast a whole sentence or perhaps to change track completely. In these situations, as when the correction applies to just one word or part of a word, a filled pause signals that the immediately preceding sequence should be disregarded, this way a hearer will not focus his attention on it. Also, sometimes, it might hint that the speaker has finished floundering and

will pull himself or herself together and continue the interaction. It is obvious that such an indication is very helpful to the listener; it can be a decisive element in his interpretation of the message, and contributes to the overall facilitation of the comprehension, which is one of the basic tasks of FPs. “In a Chomskyan framework, ‘both hearer and analyst are able to assign a structural description to the competence sentence assumed to underlie the performance utterance’ (Taylor, Cameron 1987: 129). Even if it is not always the case that the FP will show which out of several possible interpretations is the correct one, it will in any case indicate that the speaker is undertaking a revision of his or her utterance, and that the listener should take notice of the change.” (Kjellmer, 2011: 189)

Overlap and the structuring effect of the functions of filled pauses:

Filled pauses are commonly used to show hesitation. Quite naturally there is an element of hesitation in many of their other functions, which can to a certain extent overlap in a single utterance. The functions are not always easy to distinguish, and several of them are sometimes carried out simultaneously, as it was said earlier, speech – is a natural flow of language and speakers not always have full control over it. It is clear, for example, that the beginning of a turn often coincides with an attempt to attract attention. Highlighting and hesitation functions may well co-occur, as in

ukspok00021 It’s a Times recipe for <tc text=pause> *er er* <ZF1> ked <ZF0> kedgerree there. It’s a type of rice.

ukspok00025 <F0X> There’s a <ZF1> swima *er* <ZF0> swimathon <F0X> Yeah. <F0X> that’s what I saw” (Kjellmer, 2011: 189)

“Other simultaneous functions could be e.g. highlighting + correction, as in:

sunnow80529 Cribbing from my blimmin’ cuts job, *er*, interview with Drew Barrymore.” (Kjellmer, 2011: 190)

From the functions described above it is quite clear that filled pauses not only serve to indicate hesitation, which is the first thing scholars use to associate with them, but also have important functions in conversation. By marking off and distinguishing thought units in the spoken utterance they make the intended structural elements plain to the listener and facilitate the overall comprehension of the speech. “Although the FPs cannot be relied upon to occur consistently in an utterance, they are frequent enough and help to demarcate key structural units in the exposition: words, phrases and clause.” (Kjellmer, 2011: 190) This marks up their contribution to the syntax, which will be later explored in the study. Their role in the interchange of conversational turns is essential; they provide a mechanism

for what is often a smooth and effortless exchange of views. Other functions that FPs carry out, like catching someone's attention, focusing the listener's attention on significant elements of the utterance, or correcting part of the utterance, are also important elements in the functional set-up of the study of filled pauses.

Those are the elements that structure the message for the listener and prepare the way for his or her understanding of it. "In addition to helping the speaker in organizing his utterance by providing thinking time, FPs therefore also help to organize the utterance for the listener, who will more easily realize its structure and its main point and be able to follow the argument without being detained by potential ambiguities and side-issues." (Kjellmer, 2011: 190) After looking at the roles filled pauses conduct in a speech, it is clear that they are integral elements, important and sometimes even indispensable, in spoken delivery. "Since we are most of the time unaware of the so-called FPs, their (moderate) use will not normally affect adversely our impression of a speaker's fluency or eloquence. On the contrary, they are most of the time guiding and lubricating elements that facilitate communication." (Kjellmer, 2011: 191)

2.3. Corpus linguistics

It is important to clarify the role of corpus linguistics in the study of filled pauses. Corpus linguistics is a branch of linguistics based on the collection of language use stored in corpora, which are databases created specifically for linguistic research. This branch of linguistics is viewed by some linguists as a methodology, a certain tool, while others regard it as a separate study. The term of corpus linguistics is used from the 1980s. “Corpus studies boomed from 1980 onwards, as corpora, techniques and new arguments in favour of the use of corpora became more apparent. Currently this boom continues – and both of the 'schools' of corpus linguistics are growing...Corpus linguistics is maturing methodologically and the range of languages addressed by corpus linguists is growing annually.” (McEnery, Wilson, 2001: 218) Corpora assist in various research areas, they provide scholars with options to carry out qualitative and quantitative analysis. For example, if you would like to compare patterns of the language usage of words or phrases, like very *big* and *enormous*, or *small* and *little*, to know in what collocations the words or phrases occur, what are their neighbours, which of the words is used more often, etc., these and many more quantitative and qualitative characteristics are attainable from the corpus data analysis. Corpus research is ideally suited for answering questions about distribution, frequency and presence of a specific pattern in language. Corpora can be either written, containing large collections of texts, articles and other; or spoken, which consist of recordings of language and their transcriptions, public speech, lectures and many more. In order to determine the functions of filled pauses in speech, the language in its natural flow is to be observed. Spoken corpora serve best this purpose.

A spoken corpus is a computer database compiling audio files and text transcriptions to them. This type of corpus contains recordings of two types:

- a) Speech that is read, thus not spontaneous (for example, broadcasts sequences of numbers, book reviews or excerpts from books)
- b) Spontaneous speech (monologs, dialogs, describing-tasks)

Corpora can be based on native speech as well as on learner. Spoken learner corpus contains recordings produced by second or foreign language learners, whose transcriptions can be used in second language acquisition studies. In case we are specifically referring to English corpora, they could assist in teaching English in order to find problematic patterns for foreign students. Nowadays there are more written than spoken learner corpora. “The language covered is predominantly Language for Academic Purposes, which gets the lion’s

share because of its importance in the foreign language context. This is likely to change, however, as increased use of information and communication technologies (ICT) in foreign language teaching allows for quick and easy compilation of a wide variety of computer-mediated communication between learners.” (Lüdeling, Kytö, 2008: 261) The moderate amount of spoken learner corpora could be explained by the overall difficulties that spoken corpora encounter with the recording and transcription procedures, in order to compile a spoken corpus more time, investment and technology is needed. “The difficulty of collecting and transcribing speech is multiplied by a factor of 10 in the case of learner data, which explains the relative scarcity of spoken learner corpora. The difficulty is compounded in the case of multimedia learner corpora, which contain learners’ texts linked to audio-video recordings.” (Granger, 2008: 261) For current study, despite all of the problematic accounts, spoken corpora of native and learner English serve best the needs of the research.

3. Material and Method

In psycholinguistics pauses are studied from the perspective of their duration, distribution, and frequency. The present study focuses mainly on the frequency and distribution of filled pauses, and in treating them as hesitation phenomena it analyses them in both native and non-native speech.

3.1. Methodology, corpora, procedure of recording

In the current study, one of the methods applied is a corpus-linguistic method. The data for the study is drawn from two spoken corpora: the native speech was taken from the LOCNEC corpus (De Cock, 2010), the learner data comes from LINDSEI (Gráf, 2017). LOCNEC (Louvain Corpus of Native English Conversation) consists of recorded informal interviews of native speakers at the average age of 22 years. It is made up of 50 recordings with native English speakers. The interviews are split into three different tasks: a monologue, a spontaneous conversation and a picture description task. The size of the corpus is 117,417 tokens.

The LINDSEI (Louvain International Database of Spoken English Interlanguage) project was launched in 1995 at the Centre for English Corpus Linguistics, Catholic University of Louvain, as the spoken counterpart of the International Corpus of Learner English. (Campoy, Luzón, 2007: 216) LINDSEI is a multinational corpus which is made up of subcorpora of learner language whose L1 is not English. The Czech LINDSEI_CZ is one of these subcorpora, and was created in the years 2012–2015. It contains 50 transcriptions of approximately 15-minute interviews of Czech advanced learners of English at the average age of 22 years. “The majority of these was made in the recording studio of the Institute of Phonetics FF UK, however some were made only with a dictaphone. The speakers were 3rd year (and higher) students of the English Language at the Department of English Linguistics and ELT Methodology, Faculty of Arts, Charles University. The speakers signed an informed consent that the data could be used for research, and then they completed a questionnaire.”³ The size of LINDSEI_CZ is 123,761 tokens.

³ Available from: http://wiki.korpus.cz/doku.php/en:cnk:lindsei_cz.

Each of the speakers in both corpora was interviewed and recorded; the structure of the interviews in LOCNEC and LINDSEI is identical and consisted of three basic tasks, as following:

1. A monologue on a topic of chosen by the student:
 - a). memorable travelling experience
 - b). important or life-changing experience
 - c). favourite movie or book.
2. Informal conversation on every day topics. The speaker was asked about his/her thesis, direction of future study, hobbies, plans for the near future, university life in general, thus a dialog between the interviewer and the speaker was held.
3. Narrative based on describing four images – monolog with interruptions (questions from the side of the interviewer).

The nature of the tasks encourages spontaneous conversation, in which all of the hesitation markers can be revealed. The interview having consisted of various spoken tasks can expose the different speaking attitude of the recorded person, thus giving a more explicit picture regarding the use of filled pauses. Also, this pattern of the interview offers a friendly atmosphere, in which speakers feel at ease, resulting in a natural flow of speech. A request, in which students were instructed, not to make any notes contributes to the fact that speech production was as spontaneous as possible and this is vital for the research of the phenomenon of filled pauses. The length of the informal interviews is quite similar in both corpora: approximately 2,000 words of interview speech each. All of the interviews were transcribed, including all of the paralinguistic sounds, such as laughing and coughing; as well as different hesitation markers. The filled pauses that were investigated in the current study are: *er*, *eh*, *em*, *mm*, and *erm*.

Given the large number of filled pauses identified in the whole dataset, a random selection of 5 speakers from each corpus was made. This way all of the recordings could be looked upon with a greater detail and a distinguishing amount of filled pauses could be identified and analysed. From LOCNEC were randomly chosen speakers E001, E002, E003, E004, E005; respectively from LINDSEI_CZ – CZ001, CZ002, CZ012, CZ037, CZ050. The size of the transcribed interviews in LOCNEC is 9,261 tokens, and in LINDSEI_CZ it comprises 10,048 tokens. In the native corpus, the length of each interview was approximately the same, whereas in the learner corpus it varied greatly among the speakers, which might be due to their different levels of willingness to

communicate. As the interview with CZ001 is 1,986 tokens, CZ002 – 2,197, CZ012 – 3,405, CZ037 – 1,336 and CZ050 – 1,124 tokens.

3.2.Procedure of analysis, processing: program, coding

The first step was to identify individual occurrences of filled pauses in the selected transcriptions. This was carried out in the concordancer AntConc (Anthony, 2019) and the individual instances of the filled pauses within the surrounding text (i.e. with their collocates) were excerpted. The resulting text files were analysed to eliminate the occurrences of filled pauses made by the interviewers.

The next step was to analyse every filled pause in the transcribed speech on the basis of its position in the utterance, its relation to phrases and their components, and attempt to attribute a function that a concrete filler carries. All the instances where a filled pause was used were coded on the ground of three criteria:

- Sentence position (initial or middle);
- Occurrence before a clause or not;
- Occasion before or in the middle of a specific phrase from the perspective of syntax. This criterion is somewhat problematic, for which was created a special group for all the interesting and ambivalent cases – Other.

The process of coding was conducted in Microsoft Excel. For each of the three earlier mentioned dimensions a specific label was used to code the filled pauses. Following are the codes that were used in the current research for each occurrence.

- I. Sentence position:
 - i. Initial – IS,
 - ii. In the middle of the sentence – MS.
- II. Occurrence before a clause – BC.
- III. Position in relation to a phrase can be either initial or in between the phrase constituents:
 - i. Initial position in a noun phrase – INP,
 - ii. Initial position in a verb phrase – IVP,
 - iii. Initial position in an adjectival phrase – IAP,
 - iv. Initial position in an adverbial phrase – IAvP,
 - v. Initial position in a prepositional phrase – IPrP,
 - vi. Middle position in a noun phrase – MNP,
 - vii. Middle position in a verb phrase – MVP,
 - viii. Middle position in an adjectival phrase – MAP,
 - ix. Middle position in a prepositional phrase – MPrP,

- x. Other instances of filled pauses – O, a specific group for all the ambiguous cases of filled pauses occurrence.

In all of the analysed occurrences of FPs was found no evidence of middle position in an adverbial phrase, which is why no code was created for it. Below is an extract from the Excel working sheet, where the last three columns indicate the characteristics of the filled pause regarding its position with the respective codes. Current work sheet contains transcribed utterances from LINDSEI_CZ (Gráf, 2017).

№	utterance before a FP	utterance with a FP	speaker	Collocation with a phrase	Position in the sentence	Occurrence before a clause
15	many in many ways . but . you can't camp .	(er) where you want . so: (em) . we went to	CZ001.txt	O	MS	BC
16	. you can't camp . (er) where you want . so:	(em) . we went to Scotland . and I was . I	CZ001.txt	INP	MS	
17	I was . I was impressed <laughs> really because	(em) . the landscape was just beautiful . the peop	CZ001.txt	INP	MS	
18	nice . s= really . we for example we got lost	(eh) on several occasions and they were always ver	CZ001.txt	IPrP	MS	
19	lost and they just thought that we were lost .	(er) so they wanted to help us . (eh) when	CZ001.txt	O	MS	BC
20	were lost . (er) so they wanted to help us .	(eh) when we found out that the local village	CZ001.txt	O	MS	BC

Figure 3.1. A Microsoft Excel worksheet – example of coding

All of the examples that are to be provided in the current BA thesis can be found in the Appendix which is on a CD-ROM attached to this work. The references in the brackets near the examples will guide how to find them: E00_ or CZ00_ indicate whether it is a speaker from a native or a learner corpus and the number after coma indicates the line number that is to be searched for in the respective corpus. To grasp how the coding system works, following are a couple of examples, with the appropriate codes, from the materials that have been used in a research in this paper (LINDSEI_CZ (Gráf, 2017), LOCNEC (De Cock, 2010)):

- 1) “used to want to: *er* open a computer shop...” – MVP, MS (E003, 62);
- 2) “his drawing and <X> and *eh* and *eh* she probably says no I don't...” – O, MS, BC (E004, 88);
- 3) “some other people *em* an older man from Whales...” – INP, MS (CZ001, 33);
- 4) “*Eh* It depends on if he...” – INP, IS (CZ001, 99);
- 5) “we plan going there again *erm* at the beginning of the next...” – IPrP, MS (CZ002, 146).

All of the filled pauses found in the transcriptions of the recordings were coded as shown allowing to see their distribution in both native and learner speech. Thus, it is visible that the coding system applied in the current study aimed at showing the distributional characteristics of the filled pauses with special regard to the syntactic elements they

collocate with. Log-likelihood tests have been used to compare the two corpora to establish instances of underuse or overuse and test the underlying hypothesis that native English speakers and advanced English learners produce filled pauses with different frequency. To this end an online log-likelihood and effect size calculator was used.⁴

⁴ Available from: [www. http://ucrel.lancs.ac.uk/llwizard.html](http://ucrel.lancs.ac.uk/llwizard.html).

3.3.Uncertainties, challenges and methodological concerns

It is crucial for this particular study to note that the used corpora are spoken, thus the recorded speech is spontaneous. The choice of unplanned, spontaneous language provides a perfect opportunity to observe all of the hesitation phenomena. The speaker reacts to the tasks he is presented with and his utterances include filled pauses. In the used corpora, within a framework of spontaneous and natural flow of language, speakers use other discourse markers, reformulating expressions and many more. Alongside, there were occurrences of vocalized filled pauses before such markers, which makes the process of syntactic coding more complicated and even ambiguous at times. On one hand discourse markers are words or phrases which aim to function in order to link segments of the discourse to each other in ways that reflect choices of monitoring, organization and management exercised by the speaker. On the other hand, the appearance of filled pauses before these linking elements aims at a different effect, which creates ambiguities when defining a role of a filled pause in the utterance. The most common discourse markers encountered in investigated spoken corpora are mostly single words such as *anyway, fine, good, great, like, now, oh, okay, right, so, well*, and phrasal and clausal items such as *you know, I mean, as I say*. This contributes to an uncertain recognition of the role the filled pause carries in the utterance with other discourse markers.

Tasks are formulated in such order to achieve a spontaneous conversation on the side of the speaker, thus other hesitation phenomena also occur in the resulting text as the speakers frequently need to buy time for formulating their utterances. It was observed in the current paper that speakers tend to articulate a filled pause when they are repeating words. This poses a question of how such filled pauses should be interpreted in the framework of the research, as they do not occur before certain syntactical constituents carrying a function, they are rather in themselves functioning as a hesitation marker before a hesitation marker.

Another challenge are the breathing pauses that occur in the recordings. The transcriptions provide information on how long the pauses last, explaining this with special elements. A speaker might have been uttering a word and accidentally pronounced the beginning of the word, which sounds like *er*, in this filled pause he could have taken a breath of fresh air and will continue his utterance further. Also, filled pauses occurred in between the syllables of the word, when they want to reformulate it.

One of the concerns in the study of the filled pauses is connected primarily with the used dataset. Gráf in his article mentioned that while transcribing the recordings of speeches in LINDSEI not always it is “possible to distinguish between “nasalised” (*eh, er*) and “unnasalised pauses” (*em, erm*)” (Gráf, 2017: 31) but the present study does not draw any conclusions as to the difference between these two realisations as regards their position within clauses and constituents.

While having the discourse markers described above and working with the syntactical side of the language, the syntactical codes might look subjective on some of the examples. In the cases described above – coding a use of a filled pause, grouping it and determining a function of is a fairly subjective process.

When entering a field of spontaneous flow of speech any scholar has to be aware of the challenges and uncertainties that are waiting for him. Even though nature of human language is unpredictable, different language tools may facilitate its comprehension and they help the speaker, sometimes unconsciously, in contributing to conveying of the message. As mentioned in the previous chapter, for all of the ambiguous and interesting cases there have been created a special group of Other cases, the examples from this group will be looked upon with greater detail in the coming chapter.

4. Research and its results

In the framework of the current study, when talking about results of the research, it is vital to note that once we start to say how a filled pause is used and why it is used in this specific way, then at this moment we are entering a field of speaker's intentions, and at times it is challenging to definitively determine what those are in a specific communication.

4.1.Filled pauses of the research in numbers

Having analysed all of the chosen filled pauses (*er*, *eh*, *em*, *mm*, *erm*) in the selected transcriptions, a total number of 1,324 occurrences was identified; the distribution between corpora is as follows: 668 – occurrences of FPs in learner corpus and 656 in the native one. The following table shows the number of occurrences of individual filled pauses in analysed native and learner language.

Occurrences of individual FPs			
FPs	LOCNEC	LINDSEI_CZ	total
<i>er</i>	172	299	471
<i>erm</i>	158	54	212
<i>eh</i>	117	173	290
<i>em</i>	49	127	176
<i>mm</i>	160	15	175
total	656	668	

Table 4.1. Occurrences of individual FPs in the corpora

The absolute frequency of filled pauses in the learner corpus is only slightly bigger than in the native one, but the result is not statistically significant ($G^2=1.33$, $p>0.05$); the slight overuse of filled pauses by the learners could perhaps be explained by certain non-confidence of learners in their language skills, which results in a marginally more frequent use of filled pauses. Notwithstanding, the distribution of individual filled pauses in the study presents more interesting results. The following figures show the relative distribution of filled pauses in each corpus.

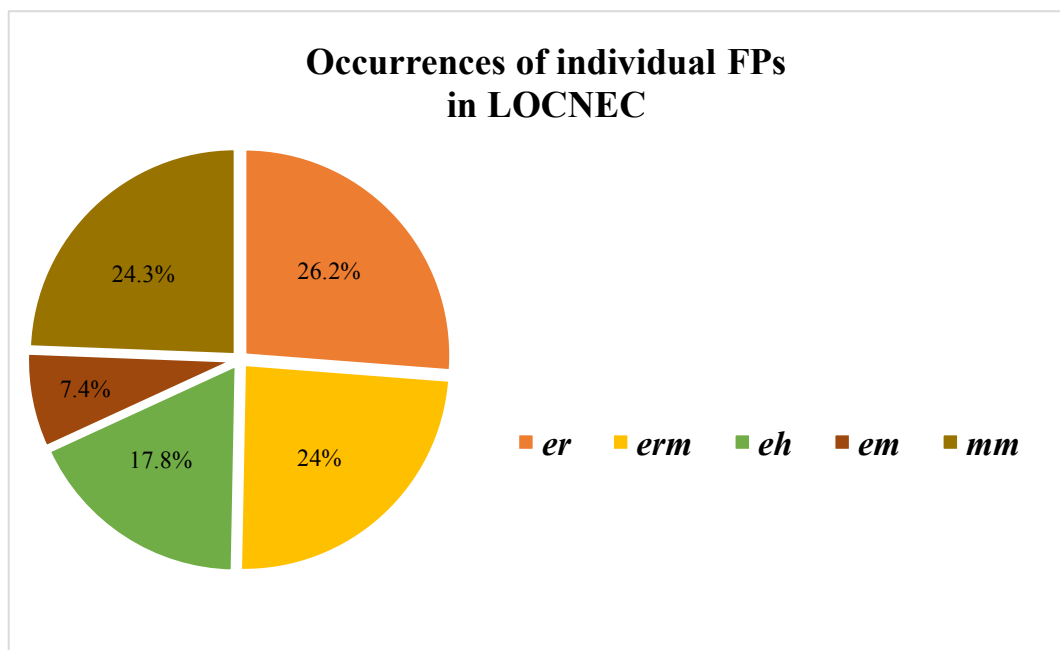


Figure 4.1. Occurrences of individual FPs in LOCNEC

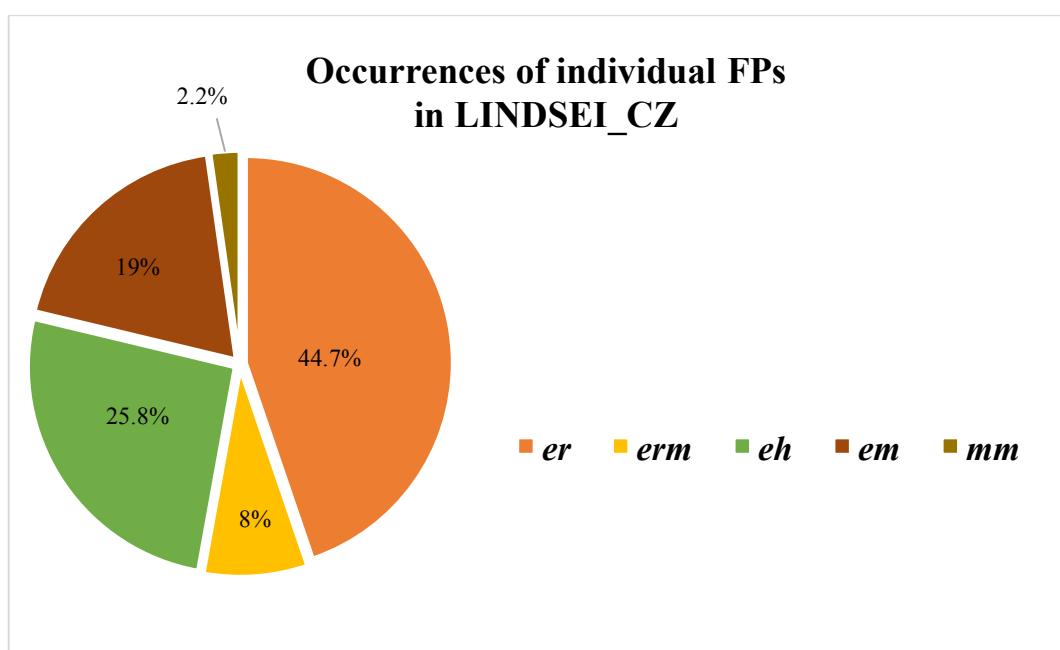


Figure 4.2. Occurrences of individual FPs in LINDSEI_CZ

The distribution of individual filled pauses is different in each of the corpus. From the diagrams, it is seen that both in native and in learner speech the filled pause *er* is the most commonly used. In terms of numbers, whereas in learner speech this filled pause is greatly prevailing, in native it shares almost an equal part with all of the other FPs dominating only by 1.9%. The most rarely used filled pause in transcriptions of native speech is *em*, while in learner the same filled pause is the 3rd most used one. *Mm* is the

most uncommon filled pause in learner conversation, only 2.2% of usage, at the same time in native recordings it is the 2nd most frequent filled pause.

Uses of *mm* in native and learner speech:

- 6) “And *mm* yeah yeah that’s about it” – (CZ001, 86);⁵
- 7) “...this is *mm* a bit of a problem for me” – (E004, 128).

⁵ The reference system of the examples in the paper was explained in Chapter 3 of this thesis, page 27.

4.2.Positions of the filled pauses in the sentence

The previous subsection looked at the distribution of the filled pauses over the two corpora, this one is summoning the positions of filled pauses in the sentence and their collocates based on the methods and coding explained in Chapter 3.2. Investigated hesitation phenomenon is looked upon from the point of view of syntax: 1.324 occurrences of FPs in the used datasets are divided into groups in relation to their position in the sentence and their relation to phrasal entities.

In terms of sentence position, FPs have either initial or middle position in the sentence. From 1,324 analysed uses of filled pauses 425 occurrences were of initial sentence position, while 899 were in the middle of the utterance. These numbers show that speakers are more likely to use such hesitation mark as filled pause in the middle of the sentence rather than in its beginning. In this case, it is vital to compare this characteristic in our two corpora. The following figure shows the division of the two positions in the corpora. Clearly, there appears to be a tendency amongst both groups to use filled pauses in the middle position but this tendency is much stronger in the learners, as confirmed by a chi-square test for independence, which returned $\chi^2(1, n = 1,322) = 153, p < 0.001$.

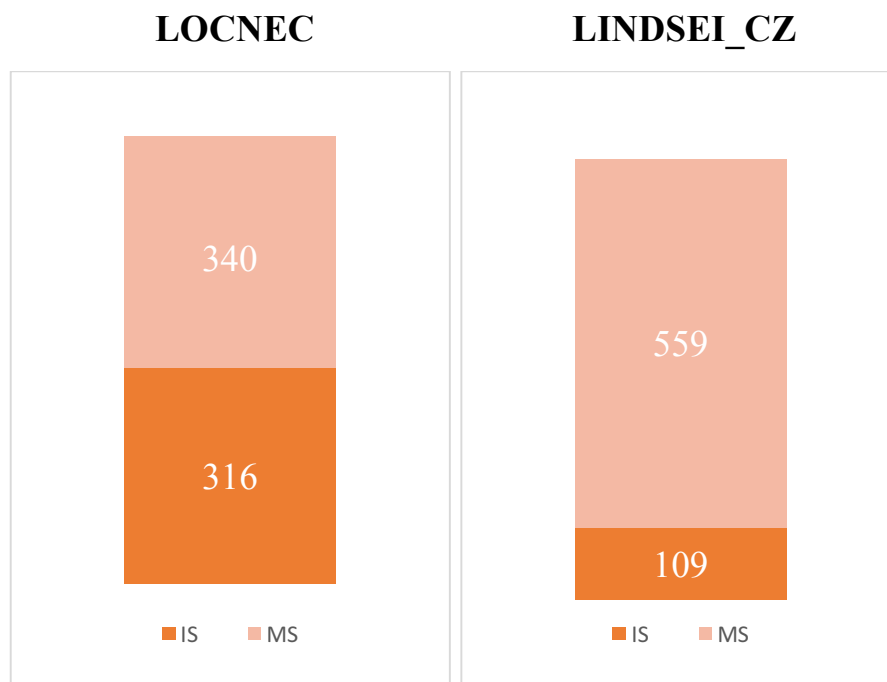


Figure 4.3. Division of FPs' sentence position in the corpora

The diagrams show that in the analysed native transcriptions the difference between sentence initial and middle positions of filled pauses is not major, 316 versus 340

respectively, which is not statistically significant ($p > 0.05$)⁶. At the same time, learner speech transcriptions present with a significant gap between these two positions, as attested by the statistics: $\chi^2(1, n=668) = 301, p < 0.001$. In learner speech filled pauses occur at the beginning of the sentence only 109 times out of 668 occurrences overall. The necessity to use a filled pause in between the sentence constituents can be explained by the need to pause in order to reformulate some of the thoughts, also it signals intonation change, or a speaker is using any of the filled pauses when correcting himself/herself. Learners of English are more likely to benefit from the additional pause in the middle of the sentence.

Examples of filled pauses from the corpora occurring in initial and middle sentence positions:

- 8) “Didn’t think I would have much chance of *er* getting a job without any further qualifications” – MS (E001, 6);
- 9) “For example we got lost *eh* on several occasions” – MS (CZ001, 19);
- 10) “*Em* we got there and the first thing that we noticed...” – IS (E003, 24).

The next characteristic that is being analysed in the current study is the position of the filled pause in relation to a phrase or its constituents. From 1,324 occurrences of filled pauses 733 have initial phrase position, 85 are found in the middle of the phrase and 506 cases form a group of Other, which will be looked upon in the next subsection. The table below shows all the positions filled pauses occupy in the analysed transcriptions: they occur at the beginning of the phrase or in the middle of it (the coding system is explained in Chapter 3.2.). The number of individual occurrences are presented both in LOCNEC and in LINDSEI_CZ for comparative analysis.

⁶ $\chi^2(1, n=656) = 0,878, p = 0,349$

FPs' position in the sentence				
Position		LOCNEC	LINDSEI_CZ	total
Initial, I	INP	240	274	514
	IVP	39	40	79
	IAP	8	6	14
	IAvP	8	43	51
	IPrP	21	54	75
total initial		316	417	733
Middle, M	MNP	23	18	41
	MVP	16	23	39
	MAP	1	1	2
	MPrP	2	1	3
total middle		42	43	85

Table 4.2. FPs' position in the phrase

The results of the research show that occurrence in an initial position of a phrase is more common for a filled pause than in the middle of the phrase: 733 occurrences versus 85, which says that speakers do not tend to pause in between the phrase constituencies. This is common for both of the corpora. Examples from the transcribed speech:

11) “Actually *er* my boyfriend is a photographer” – INP, MS (CZ050, 667);

12) “We were expecting sort of *em* storms and very cold...” – MNP, MS (E005, 43);

13) “*Em* I can't remember what it's called” – INP, IS (E005, 40).

The most frequent occurrence of a FP is before a noun phrase – 514 occurrences in the corpora, both prevailing in native and learner speech, 240 cases versus 274 ($p > 0.05$, which means that the slightly bigger number of occurrences in the learner corpus is not a significant difference, rather a coincidental occurrence). With a small difference positions such as IVP and IPrP share the 2nd place after INP:

14) “*em* for the evening meal we would just...” – IPrP, MS (E005, 41);

15) “And he *er* had such a good vocabulary and also...” – IVP, MS (CZ050, 627).

The least common position according to the research is before an adjectival phrase – only 14 occurrences:

16) “*er* grateful to the teachers here” – IAP, MS (CZ012, 433);

17) “I've always been *erm* very keen on reading” – IAP, MS (E002, 36).

Also, learners of English are more prone to insert a filled pause before an adverbial phrase and a prepositional one than native speakers: 8 against 43 and 21 versus 54 respectively (both results are significant at $p < 0.001$).

In the initial position filled pauses carry certain roles in the delivery of information. Among the identified functions in the analysed occurrences of filled pauses in their initial phrase position belong:

- i. Facilitating comprehension in all possible ways by providing processing time
- ii. Marking hesitation
- iii. Signposting speakers turns, specifically turntaking. Initial phrase position in combination with initial sentence position of a filled pause is where this role most typically is carried:
 18) Interviewer: “Yes read out the topic and” CZ002: “*Em er* I will be talking about a film or...” - INP, IS (CZ002, 103);
 19) Interviewer: “Brisbane is it the south” E003: “*Er* I think so I’m not quite sure” – INP, IS (E003, 53).
- iv. Attracting attention, especially when the speaker is just taking his/her turn to speak
- v. Highlighting
- vi. Distinguishing thought units.

Among the phrases, in which filled pauses tend to occupy middle positions, the most frequent are NP and VP, the least popular are AP and PrP:

- 20) “and it’s about life in a *eh* public school in America” – MNP, MS (E001, 2);
- 21) “and my family we used to *er* travel to Croatia every now and then” – MVP, MS (CZ012, 322);
- 22) “The main *eh* person behind it” – MNP, MS (CZ001, 45);
- 23) “Of course we always tried breaking records *er* of how long can you” – MPrP, MS (CZ012, 413);
- 24) “...it was quite well sort of *erm* filmed and...” – MAP, MS (E004, 103).

Amid the identified types of the middle position in the phrase, there was found no example of a middle position in adverbial phrase, whereas such occurrences in initial phrase positions were identified. During the research, it was established that not all of the FPs collocate with all the phrases, as for example in native corpus pauses *em* and *eh* do not occur before IAvP and *em* does not appear before IVP; *mm* does not appear at all in the middle of a NP and a VP, in MAP occurs only *erm* and in MPrP only *eh* and *em*. Likewise,

in learner corpus not all of the filled pauses collocate with the certain phrases and their constituencies. *Mm* is not used by learner speakers of English in IAP, IVP and IPrP. In the middle of AP and NP the only pauses that occur are *eh*, *er* and *em*; in MPrP – *er*.

Overall it is seen from the results of the research on FPs' positions in relation to the phrases that speakers tend to articulate a FP before or in the middle of a noun phrase. The rest of the phrases, whereas providing with information about time, place or circumstances of what the speakers is saying, are less hesitant pieces of information. This makes the noun phrase more likely to be reformulated, changed after a filled pause; or it is the one that is more challenging for the speaker to formulate in the whole utterance.

In terms of functions that filled pauses have in the middle of the phrase, the following were identified as the most common:

- i. Marking hesitation
- ii. Signposting speakers turns – turnholding. This role of a FP was observed in situations where a speaker was still formulating his utterance and having a fear of being interrupted was buying some time for finishing articulating his utterance.
- iii. Correction.

During current study filled pauses were also analysed on the subject of occurrence before a clause. Some filled pauses were not only used before a certain phrase, but also before another clause. The use of filled pauses before clauses is explained by the need of the speaker to pause before another syntactical element will follow, which will bring a different type of information or will provide additional level of it. In such cases speakers need to arrange their thoughts and hesitation marker is obvious to appear. Among the investigated 1,324 occurrences of filled pauses in the corpora 497 occur when a clause follows the pause. For example:

- 25) “I have a part time job but *er* when I have time I’m glad...” – MS, BC (CZ050, 645);
- 26) “so she won *er* and they all get to the factory...” – MS, BC (CZ050, 567);
- 27) “It is quite nice living off campus because *erm* you don’t feel stuck on campus” – INP, MS, BC (E003, 55);
- 28) “afford to sort of waste any more time *eh* cos I’ve got to earn some money” – MS, BC (E001, 17).

While examining the filled pauses in this position, the following functions were recognised:

- i. Facilitating comprehension by groping elements into logical constituents and separating them
- ii. Shift of topic, especially when words like ‘well’ or ‘right’ are following the filled pause
- iii. Marking hesitation
- iv. Signposting speakers turns – turntaking, this function is greatly observed in initial positions described above
- v. Highlighting
- vi. Distinguishing thought units, when a speaker wants to separate the information in a clause from a main utterance.

The following figures show the nature of FPs’ distribution before clause over LOCNEC and LINDSEI_CZ.

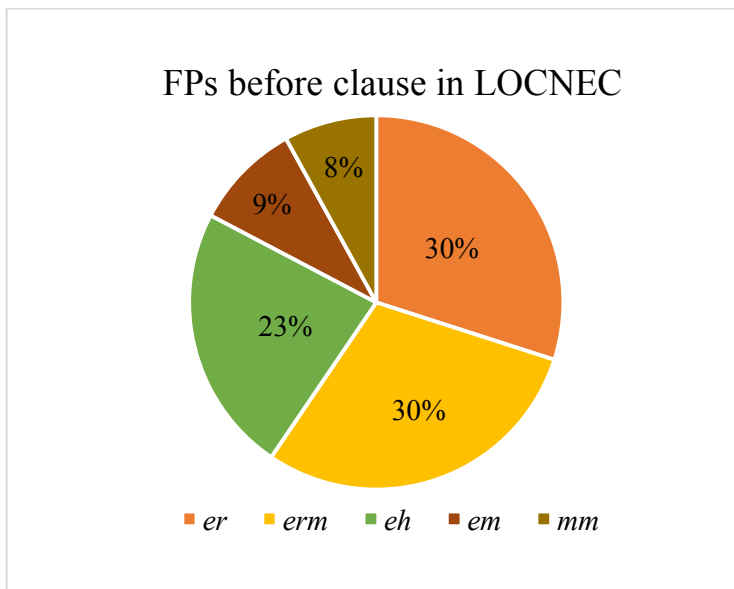


Figure 4.4. FPs before clause in LOCNEC

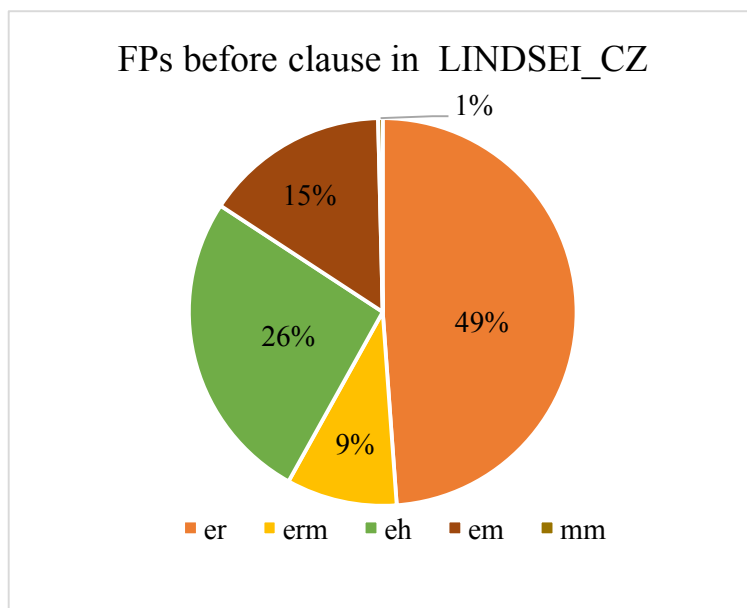


Figure 4.5. FPs before clause in LINDSEI_CZ

From the figures is clear that although native speakers tend to articulate *er* as often as learners before clauses, all the other FPs have slightly dissimilar distribution in the corpora. In native corpus *er* and *erm* have leading positions in occurrence BC, in learner corpus the most frequent filled pause appearing in this position is *er*. In both corpora, the least frequent filled pause appearing before clause is *mm*, but whereas in native speech it appeared at the rate of 8% percent, in learner – hardly 1% from overall occurrences of FPs before clauses.

In this subsection of the study were presented the results from filled pauses analysis on the subject of their positioning in the sentence, in the syntactical phrases and whether or not they occur before clauses. Also, it was given attention to the types of phrases they occur before or in the middle of. Alongside, were highlighted the main functions, in accordance with the positions of FPs, encountered during the research. Throughout the study, all of the individual occurrences of FPs were coded according to the phrases they co-occur with, in Chapter 3 a special group of Other was mentioned and it is going to be looked upon in the following subsection.

4.3. Other instances of filled pauses

In present paper while coding the filled pauses in relation to the phrases they collocate with, a group of Other was separated. This group contains all of the cases that could not be classified into the existing groups, as did not correspond in all of the parameters with the rest of the occurrences; they present interest due to their ambiguity and are better analysed alone. Among 1,324 encountered filled pauses 506 were classified as Other: 298 in the native corpus and 208 in the learner one. Here it would appear that this category is more frequently represented in the native corpus ($G^2=24.28$, $p<0.0001$) but a more detailed analysis would have to be carried out as to why this is the case. The following two examples selected from this category show that such filled pauses would have to be categorized separately:

29) “*Em* no no” – O, IS (CZ002, 190);

30) “I guess not appreciated *er* yeah but” – O, MS (CZ002, 301).

In the first example filled pause occurs in a declarative negative sentence before ‘no’, which could be viewed as a noun phrase in itself or a particle; or in the second example – before a particle yeah, which is seen as an affirmative. No noun or for example verb phrase follows these particles, which would clarify the position of the filled pause regarding the phrase. This is why for such cases a different group was needed. In sentences where filled pauses were classified into group Other often the same filled pause or any other was articulated repeatedly over the utterance.

When researching this group, in the occurrences of filled pauses certain patterns of similarities were identified, as the result of the research 5 subgroups can be distinguished:

1. Occurring before affirmative or negative particles ‘yes’, ‘no’, ‘yeah’:

31) “*Er* no *er* there are certain places” – O, IS (E005, 146);

32) “*Er* yeah” – O, IS (E005, 145);

33) “*Em* yes I just wanna know” – O, IS (CZ002, 284);

34) “*Em* no I hope” – O, IS (CZ001, 50).

2. Occurrences before interjections:

35) “Yeah *em* wow the TV show not” – O, MS (CZ002, 244);

36) “*Em* well no *er* I mean I’m...” – O, IS (E005, 50).

3. Occurrences before repeats. Even though during study there were found cases when speakers repeated the beginning of a phrase or any of its constituents, in order to receive more detailed results from the research, it is

vital to separate those cases from a regular occurrence of a filled pause before or in the middle of any phrase. From following examples, it is certain that a speaker made a filled pause not specifically because of which phrase is following but because of the repeat itself:

- 37) “I love reading but before I *eh* I studied English studies and literature” – O, MS (CZ001, 77);
- 38) “We could see lots of different kind of shellfish and *er* and *er* even the crab like” – O, MS, BC (CZ012, 373);
- 39) “afford now but *er* but I’d like to again some time” – O, MS, BC (E001, 24);
- 40) “and basically the *er* the young lion grows up” – O, MS (E002, 31);
- 41) “managed to drag himself up and *erm* and they think they’ve giving their son” – O, MS, BC (E001, 14);
- 42) “as a s *eh* as a sort of field of study I” – O, MS (E001, 15);
- 43) “my mom went here for a *em* a school” – O, MS (E001, 8).

4. Occurring before conjunctions (both coordinating and subordinating):

- 44) “*Em* but my other one was a hundred percent” – O, IS, BC (E001, 2);
- 45) “which isn’t quite true *em* but eventually she’s quite happy with it” – O, MS (E003, 23);
- 46) “*Erm* because he’s just” – O, IS, BC (E001, 13);
- 47) “which would be safe *er* because *eh* it was girls who...” – O, MS, BC (CZ001, 7);
- 48) “and things like that and *em* so what was the question” – O, MS, BC (CZ001, 57).

5. Occurrences at the end of the sentence, during the research this was one of the most interesting categories. The most frequent filled pause that had such use is *mm*, almost half of the cases that were codified as Other are at the end of the utterance:

- 49) “No no *em*” – O, MS (CZ002, 191);
- 50) “Probably the nicest experience I’ve had from that *er*” – O, MS (CZ012, 353);
- 51) “Yeah yeah yeah *erm*” – O, MS (CZ002, 229);
- 52) “Don’t remember he was from Scotland *mm*” – O, MS (E001, 11);
- 53) “learn something new *mm*” – O, MS (E001, 32).

In the analysed group Other occurrences of filled pauses were also studied from the perspective of their roles in the utterances. Since in general Other is a group combining all of the ambiguous and problematic cases, functions of the FPs also are not easy to

distinguish. During the study, the following functions were identified as common for the 5 subgroups discussed above:

- i. Marking hesitation
- ii. Facilitating comprehension by providing processing time for the listeners
- iii. Shift of the topic, especially before affirmative or negative particles and interjections
- iv. Distinguishing thought units. One of the most frequent function in Other group. Most of the times is carried by filled pauses that occur before conjunctions
- v. Turnholding, often found at the end of the utterance
- vi. Highlighting
- vii. Correction.

5. Conclusion

Interruptions and pauses are an indispensable part of speech and daily communication. Filled pauses have received relatively little attention and often have been regarded as meaningless elements resulting from speech processing and production difficulties. Which led to the negative evaluation of not only this phenomenon, but of hesitation marks in general. In this filled pauses have a special place, as listeners who judge frequent hesitation negatively, build their negativity basing on filled pauses specifically, rather than on other hesitation tools. Scholars have various theories on this respect, one factor that could explain this: filled pauses such as *er*, *eh*, *erm*, *mm*, *um*, *uh* and others are easier to grasp by the ear, thus can be immediately identified in a flow of language by the hearer. Albeit, hesitation markers are an important part of the conversation and by many linguists have been regarded as not simply markers of dysfluency. Those markers have been investigated to have a number of functions that help speakers in organizing the conversation. The aim of the current study was to investigate the phenomenon of filled pauses in both native and learner English from the point of view of the positions of FPs in the sentence.

For the purpose of this research, spoken corpora were used since they contain samples of spontaneous speech, where filled pauses naturally occur. Transcriptions of recorded speech of 5 native speakers and 5 advanced learners of English from 2 datasets LOCNEC and LINDSEI_CZ were selected and a total of 1,324 individual occurrences of filled pauses in both corpora were identified. Based on the transcriptions filled pauses were then analysed with regard to their position in the sentence. For the purpose of the analysis a coding system was applied to the investigated filled pauses. The results of the research present the distribution of filled pauses over corpora with division of the individual occurrences of FPs, the frequency of their occurrences, the analysis on the most and least frequent FPs. Also, during the research the connection between syntactical elements such as phrases and clauses and filled pauses was evaluated. The provided examples from the corpora give information on the surroundings of the FPs, which illustrates the motives and the functions they carry in the communication. Alongside with the analysis of positions of filled pauses, in the current study were presented the functions and roles filled pauses carry with regard to the specific positions they maintain in the utterance. It has been discovered that if a filled pause occurs in a place which might be perceived as discourse boundary,

then a hearer regards it as a discourse boundary, which in its own way facilitates the perception of the speech. It is also important to keep in mind that the process of filled pauses investigation requires certain speculations about its results, as in dealing with the phenomenon of hesitation markers scholars are entering a field of speakers' intentions, whose evaluation is necessarily subjective.

The analysis of the results indicates that advanced learners in the analysed sample do not significantly overuse filled pauses. However, they use the different forms (*er*, *erm*, *eh*, *em* and *mm*) with different frequency. This might, however, be affected by the quality of the transcription as the two corpora have been transcribed by different people. The most striking difference appears to be the significant tendency amongst the learners to use filled pauses within clauses rather than at the beginning. For native speakers there is no significant difference here, whilst for learners the difference is large. It would appear that learners feel a greater need to plan their utterances within a sentence and not only at the beginning. As to why they do not pause as frequently at the beginning of clauses the nature of the dataset does not allow us to speculate. Here, the analysis of more speakers but also of other hesitational phenomena would have to be explored as it is perfectly possible that L2 speakers prefer using different hesitational phenomena (e.g. repeats or false starts) at clause beginnings. These results, however, have to be interpreted with caution as they might be partly affected by the study's main limitations, namely the fact that only five speakers from each group were analysed and also the fact that the process of determining the positions within clauses and constituents may be somewhat subjective in spoken speech annotation and the samples were annotated by only one rater (thus no inter-rater agreement can be taken into account).

Overall this BA thesis has fulfilled its goal and can be helpful in future analysis of the phenomenon of filled pauses or in exploring other hesitational devices in native and learner speech. It can be a basis for future research of filled pauses and can be applied in other studies on comparison of the use of filled pauses in native and learner English, where English learners have various L1s.

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7. Résumé

Záměrem této bakalářské práce bylo prozkoumat jev vyplněných pauz jako jev váhání v rodilé a žakovské angličtině. Analyzované vyplněné pauzy jsou následující: *er*, *erm*, *eh*, *em* a *mm*. Cílem práce bylo prozkoumat fenomén vyplněných pauz z ohledu vztahu mezi pozicemi vyplněných pauz ve větách a funkcemi, které mají. Také, jednou z intence práce byla analýza vyplněných pauz jako strategie řízení řeči. Jedna z hlavních metod používaných v práci je srovnávací mezi jazyková analýza.

Výzkum je založen na řeči rodilých mluvčích z korpusu LOCNEC, který je vybudován na transkripcích rozhovorů s rodilými mluvčími angličtiny a na řeči mluvčích z paralelního korpusu LINDSEI_CZ, který obsahuje transkripce projevů českých studentů angličtiny. Rozsáhlost korpusů je relativně podobná: LOCNEC – 117 417 tokenů, velikost LINDSEI_CZ je 123 761 tokenů. Vzhledem k velkému počtu vyplněných pauz identifikovaných v celé datové sadě byl vytvořen náhodný výběr 5 mluvčích z každého korpusu. Tento způsob umožnil podrobněji sledovat všechny záznamy, identifikovat a analyzovat velké množství vyplněných pauz. Z LOCNEC byli náhodně vybráni mluvčí E001, E002, E003, E004, E005; z LINDSEI_CZ – CZ001, CZ002, CZ012, CZ037, CZ050. Velikost přepsaných rozhovorů v LOCNEC je 9 261 tokenů a v LINDSEI_CZ – 10 048 tokenů.

Práce byla formálně rozdělena do 7 kapitol. Úvod poskytuje obecné informace o tématu bakalářské práce, cíle studie a také krátký přehled struktury práce. První část práce pojednává o teoretickém východisku pro předmět vyplněných pauz a klíčových pojmech relevantních pro práci. Teoretická část popisuje začátek pauzologie jako oboru lingvistiky, uvádí její průkopníky. Fenomén pauz, který existuje ve všech jazycích dal vzniknout oblasti lingvistiky – pauzologie. Vědec Goldman-Eisler je považován za průkopníka pauzologie, který publikoval první pauzologické experimenty ještě v padesátých letech minulého století. Jev pauz je také studován v psycholingvistice, tam se zaměřuje na studování trvání pauz, jejich distribuce a frekvence. V této práci se hlavním způsobem studuje distribuce vyplněných pauz v rodilé a žakovské angličtině. Otázky kladené v pauzologickém výzkumu mají velký význam pro výuku jazyků a přispívají k mnoha teoriím výuky jazyků.

Zatímco vyplněné pauzy byly dlouhodobě posuzovány jako jeden z hlavních ukazatelů ne plynulosti řeči v žakovském jazyce, vědci je v poslední době analyzovali v řeči rodilých mluvčích a našli velkou rozmanitost v jejich dalších rolích a funkcích. Tato

práce později komentuje různé funkce a role, které vyplněné pauzy v komunikaci odehrávají a poskytuje příklady. Nejčastější funkce, které vyplněné pauzy nesou, na nichž většina lingvistů souhlasí, jsou:

- 1) Váhání
- 2) Ukazování pořadí mluvčích
- 3) Přitahování pozornosti
- 4) Zvýraznění
- 5) Oznamění opravy/korektury

V této části studie se také mluví o překrývání funkcí a strukturovací možnosti vyplněných pauz v řeči. Vyplněné pauzy se běžně používají k projevení váhání. Zcela přirozeně existuje prvek váhání v mnoha jiných funkcích pauz, které se mohou do jisté míry překrývat v jediné promluvě. Funkce není vždy snadné rozlišit, a některé z nich jsou někdy prováděny současně, jelikož řeč – je přirozený tok jazyka a mluvčí ne vždy mají plnou kontrolu nad ním. Vyplněné pauzy také pomáhají organizovat promluvu pro posluchače, který bude schopen sledovat argument promluvy. Teoretická část končí stručným popisem korpusové lingvistiky s tím, že aktuální bakalářská práce používá korpusy pro zkoumání. Pro současné studium, přes všechny problematické účty, které jsou popisované v teoretické části práce, mluvené korpusy rodilých mluvčích a žakovské angličtiny slouží nejlépe potřebám výzkumu.

Třetí kapitola je věnována popisu používaných materiálu a metodologie zkoumání vyplněných pauz. V současné studii je jednou z používaných metod korpus-lingvistická metoda. Data pro studii byla čerpána ze dvou mluvených korpusů: řeč rodilých mluvčích byla převzata z korpusu LOCNEC (De Cock, 2010), data žakovské angličtiny pocházejí z LINDSEI (Gráf, 2017). LOCNEC se skládá z 50 nahraných neformálních rozhovorů rodilých mluvčích. LINDSEI obsahuje 50 přepisů přibližně 15minutových rozhovorů českých pokročilých studentů angličtiny v průměrném věku 22 let. Struktura rozhovorů v LOCNEC a LINDSEI je shodná a skládala se ze tří základních úkolů, jak jsou následující:

1. Monolog na téma vybrané studentem:
 - a.) nezapomenutelný zážitek z cestování
 - b.) důležité nebo život-měnicí zkušenosti
 - c.) oblíbený film nebo kniha.
2. Neformální konverzace na každodenní témata.

3. Příběh založený na popisu čtyř obrázků – monolog s přerušením (otázky ze strany dotazovatele).

Povaha úkolů povzbuzuje spontánní konverzaci, v níž lze odhalit všechny znaky váhání. Všechny rozhovory byly přepsány, včetně všech paralingvistických zvuků, jako je smích a kašel, stejně jako různé znaky váhání.

Dále v kapitole se mluví o postupu analýzy a zpracování dat, o tom, že zpracování bylo provedeno v programu AntConc (Anthony, 2019). Také se vysvětluje o logice kódování s příklady z korpusů. Všechny případy, kdy byly použité vyplněné pauzy, byly kódovány na základě tří kritérií:

- Pozice ve větě (počáteční nebo střední);
- Výskyt před klauzí nebo ne;
- Výskyt před nebo uprostřed konkrétní fráze z pohledu syntaxe. Toto kritérium je poněkud problematické, pro které byla vytvořena speciální skupina pro všechny zajímavé a ambivalentní případy – Ostatní výskyty vyplněných pauz.

Všechny vyplněné pauzy nalezené v prepisech nahrávek byly kódovány tak, jak je ukázáno, což umožnilo vidět jejich distribuci jak v řeči. Kapitola také vysvětluje nejistoty, výzvy a metodické otázky během studie.

Čtvrtá kapitola je věnovaná výzkumu na základě již zmíněných mluvených korpusů anglického jazyka. Po analýze všech vyplněných pauz ve vybraných transkripcích bylo identifikováno celkem 1 324 výskytů; rozložení mezi korpusy je následující: 668 – výskytů v žákovském korpusu a 656 u rodilých mluvčích. Rozložení jednotlivých vyplněných pauz je v každém korpusu odlišné. Zkoumaný jev váhání byl pohlížen z hlediska syntaxe: 1 324 výskyty byly rozděleny do skupin v závislosti na jejich pozici ve větě a jejich vztah k frázovým subjektům. Pokud šlo o pozici ve větě, pauzy mají ve větě buď počáteční, nebo střední pozici. Z 1 324 analyzovaných použití vyplněných pauz 425 výskytů byly na počáteční pozici věty, zatímco 897 byly ve střední pozici. Další charakteristikou, která byla analyzována v současné studii, byla pozice vyplněné pauzy ve vztahu k frázi nebo jejím složkám. Také byla věnována pozornost typům frází, které se vyskytují před nebo uprostřed. V této podkapitole studie byly prezentovány výsledky analýzy vyplněných pauz na základě jejich výskytu před klauzulemi. Vedle toho byly zdůrazněny hlavní funkce v souladu s pozicemi vyplněných pauz. Zvláště byla analyzována skupina Ostatní, o níž bylo zmíněno v předchozí kapitole práce. Výsledky výzkumu poskytují informace o distribuce

vyplněných pauz, frekvence jejich jednotlivých výskytů, o konkrétních pozicích zmíněných pauz ve větě a jejich vztahu k syntaktickým frázím.

Závěrečná kapitola shrnula výsledky a opětovně zopakovala cíle této bakalářské práce. Z analýzy výsledků vyplývá, že jedním z velkých rozdílů mezi rodilou a žakovskou angličtinou v analyzovaných výskytech je významná tendence mezi nerodilými mluvčími angličtiny používat spíše vyplněné pauzy v rámci věty než na začátku ve srovnání s rodilými mluvčími. Pro rodilé mluvčí zde není žádný významný rozdíl, zatímco u žáků je rozdíl velký. Zdálo by se, že žáci pocítují větší potřebu plánovat své projevy v rámci věty, a to nejen na začátku. Pokud jde o to, proč se na začátku klauzulí nezastaví tak často, povaha datového souboru nám neumožňuje spekulovat. Je celkem možné, že mluvčí L2 preferují použití různých váhavých jevů (např. opakování nebo falešné starty) na začátku věty, a proto vidíme velký rozdíl ve srovnání s rodilými mluvčí. Tyto výsledky však musí být interpretovány s opatrností, protože by mohly být částečně ovlivněny hlavními omezeními studie, a to skutečností, že bylo analyzováno pouze pět řečníků z každého korpusu a také skutečnost, že proces určování pozic ve větách může být poněkud subjektivní v anotaci mluvené řeči a vzorky byly anotovány pouze jedním hodnotitelem. Tato práce může být užitečná pro budoucí zkoumání různých hezitačních prostředků nebo pro další zkoumání pozic vyplněných pauz v rodilí a žakovské řeči.